

SEQ ID NO:8	Lc743	M N F N V S L M E K L K W K I K C I E N	20
SEQ ID NO:10	RM8con	1	
SEQ ID NO:7	Lc743	ATGAATTTCAACGTTAGTTTGATGGAGAAATTAAATGGAAGATTAAATGCATTGAAAAT	60
SEQ ID NO:1	RM8A	Lc743/5	
SEQ ID NO:3	RM8B		
SEQ ID NO:5	RM8C		
SEQ ID NO:9	RM8con		
SEQ ID NO:7	Lc743	K E L N Y R L T T N E T V V A E T E Y G	40
SEQ ID NO:1	RM8con	61	
SEQ ID NO:3	Lc743	AAGTTTTTAAACTATCGTTTAACTACCAATGAACGGTGGTAGCTGAACTGAATATGGC	120
SEQ ID NO:5	RM8A		
SEQ ID NO:9	RM8B		
SEQ ID NO:13	RM8C		
SEQ ID NO:17	RM8con		
SEQ ID NO:7	Lc743	K V K G V K R L T V Y D S Y Y S F E G	60
SEQ ID NO:1	RM8con	121	
SEQ ID NO:3	Lc743	AAAGTGAAAGGCGTTAAACGTTTAACTGTGTACGATGATTCCTACTACAGTTTGGAGGGT	180
SEQ ID NO:5	RM8A		
SEQ ID NO:9	RM8B		
SEQ ID NO:13	RM8C		
SEQ ID NO:17	RM8con		
SEQ ID NO:7	Lc743	I P Y A Q P P V G E L R F K A P Q R P T	80
SEQ ID NO:1	RM8con	181	
SEQ ID NO:3	Lc743	ATACCGTAGGCCCCAACCCGAGTGGGTGAGCTGAGATTTAAACGACCCCGGACCAACA	240
SEQ ID NO:5	RM8A		
SEQ ID NO:9	RM8B		
SEQ ID NO:13	RM8C		
SEQ ID NO:17	RM8con		

FIG. 1A

Lc743	P	W	D	G	V	R	D	C	C	N	H	K	D	K	S	V	Q	V	D	F	100
Rm8con	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	241
Lc743	CCCTGGGATGGTGTGCGTGATGTGTGCAATCATAAAGATAAGTCAGTCAGTCAAGTTGATTTT																				300
RM8A	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
RM8B	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
RM8C	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Rm8con	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Lc743	I	T	G	K	V	C	G	S	E	D	C	L	Y	L	S	V	Y	T	N	N	120
Rm8con	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	301
Lc743	ATAACGGGGCAAAGTGTGTGGCTCAGAGGATTGTCTATACCTAAAGTGTCTATACGAATAAT																				360
RM8A	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
RM8B	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
RM8C	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Rm8con	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Lc743	L	N	P	E	T	K	R	P	V	L	V	Y	I	H	G	G	G	F	I	I	140
Rm8con	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	361
Lc743	CTAAATCCCGAAACTAAACGTCGGTTTAACTATACATACATGCTGGTGGTTTATTATC																				420
RM8A	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
RM8B	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
RM8C	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Rm8con	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Lc743	G	E	N	H	R	D	M	Y	G	P	D	Y	F	I	K	K	D	V	V	L	160
Rm8con	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	421
Lc743	GGTGAATCATCGTGATATGTATGGTCTGATTTATTCATTAAAAAGGATGTGGTGTG																				480
RM8A	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
RM8B	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
RM8C	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Rm8con	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

FIG. 1B

Lc743	I N I Q Y R L G A L G F L S L N S E D L	180
Rm8con	-+-----+-----+-----+-----+-----+	540
Lc743	ATTAACATACAATATCGTTTGGGAGCTCTAGTTTTCTAAGTTTAAATTTCAGAAGACCTT	
Rm8A	.....
Rm8B	.....
Rm8C	.....
Rm8con	.....
Lc743	N V P G N A G L K D Q V M A L R W I K N	200
Rm8con	.....	600
Lc743	AATGTGCCCGGTAATSCCGGCCTTAAAGATCAAGTCATGCGCTTGCGTTGGATTAAAAAT	
Rm8A	.....
Rm8B	.....
Rm8C	.....
Rm8con	.....
Lc743	N C A N F G G N P D N I T V F G E S A G	220
Rm8con	-+-----+-----+-----+-----+-----+	660
Lc743	AATGTGCCCAAACCTTTGSGTGGCAATCCCGATAATAATTACAGTCTTTGGTGAAGTGCCGGT	
Rm8A	.....
Rm8B	.....
Rm8C	.....
Rm8con	.....
Lc743	A A S T H U M M L T E Q T R G L F H R G	240
Rm8con	-+-----+-----+-----+-----+-----+	720
Lc743	GCTGCGCTCTACCCCACTACTACATGATGTTAACCGGAACAAAATCGCGGTCTTTTCCCATCGTGGT	
Rm8A	.....
Rm8B	.....
Rm8C	.....
Rm8con	.....

Lc743	I	L	M	S	G	N	A	I	C	P	W	A	N	T	Q	C	Q	H	R	A	260
Rm8con	.	.	.	.	.	.	.	.	.	.	L	.	.	.	.	.	.	.	.	.	721
Lc743	A	T	A	A	T	G	T	A	T	T	T	G	T	T	T	T	T	T	T	T	780
Rm8A	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Rm8B	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Rm8C	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Rm8con	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Lc743	F	T	L	A	K	L	A	G	Y	K	G	E	D	N	D	K	D	V	L	E	280
Rm8con	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	781
Lc743	T	T	C	A	C	T	T	A	G	C	T	A	A	G	G	T	A	A	G	G	840
Rm8A	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Rm8B	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Rm8C	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Rm8con	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Lc743	F	L	M	K	A	K	P	Q	D	L	I	K	L	E	E	K	V	L	T	L	300
Rm8con	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	841
Lc743	T	T	T	T	A	G	A	A	C	C	A	G	C	A	G	G	A	T	T	A	900
Rm8A	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Rm8B	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Rm8C	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Rm8con	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Lc743	E	E	R	T	N	K	V	M	F	P	F	G	P	T	V	E	P	Y	Q	T	320
Rm8con	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	901
Lc743	G	A	G	A	G	C	T	A	C	A	A	T	A	A	G	G	T	C	T	T	960
Rm8A	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Rm8B	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Rm8C	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Rm8con	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

FIG. 1D

[illegible]

Lc743	H	V	T	G	E	T	P	T	A	D	N	F	M	D	L	C	S	H	I	Y	420
Rm8con	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1201
Lc743	C	A	T	G	T	T	A	C	A	G	A	T	T	T	T	T	G	G	A	T	1260
RM8A	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
RM8B	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
RM8C	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Rm8con	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Lc743	F	W	E	P	M	H	R	L	L	Q	L	R	F	N	H	T	S	G	T	P	440
Rm8con	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1261
Lc743	T	T	C	G	T	T	C	C	C	A	T	G	C	A	T	T	G	T	T	G	1320
RM8A	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
RM8B	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
RM8C	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Rm8con	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Lc743	V	Y	L	Y	R	F	D	F	D	S	E	D	L	I	N	P	Y	R	I	M	460
Rm8con	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1321
Lc743	G	T	C	T	A	C	T	T	T	G	A	C	T	T	T	A	T	T	A	T	1380
RM8A	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
RM8B	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
RM8C	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Rm8con	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Lc743	R	S	G	R	G	V	K	G	V	S	H	A	D	E	L	T	Y	F	F	W	480
Rm8con	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	1381
Lc743	C	G	T	A	G	T	G	G	A	C	T	T	A	G	G	G	T	T	A	G	1440
RM8A	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
RM8B	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
RM8C	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Rm8con	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

FIG. 1F

Lc743	N	Q	L	A	K	R	M	F	K	E	S	R	E	Y	K	T	I	E	R	M	500
Rm8con	1441	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	1500
Lc743	A	A	T	G	G	C	A	A	C	G	T	A	T	G	C	T	A	A	G	A	520
Rm8A	1441	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	1560
Rm8B	A	A	T	G	G	C	A	A	C	G	T	A	T	G	C	T	A	A	G	A	520
Rm8C	1441	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	1560
Rm8con	A	A	T	G	G	C	A	A	C	G	T	A	T	G	C	T	A	A	G	A	520
Lc743	T	G	I	W	I	Q	F	A	T	T	G	N	F	Y	S	N	E	I	E	G	520
Rm8con	1501	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	1560
Lc743	A	C	T	G	T	A	T	G	G	A	T	T	G	C	C	A	C	T	G	G	520
Rm8A	1501	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	1560
Rm8B	A	C	T	G	T	A	T	G	G	A	T	T	G	C	C	A	C	T	G	G	520
Rm8C	1501	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	1560
Rm8con	A	C	T	G	T	A	T	G	G	A	T	T	G	C	C	A	C	T	G	G	520
Lc743	M	E	N	V	S	W	D	F	I	K	K	S	D	E	V	Y	K	C	L	N	540
Rm8con	1561	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	1620
Lc743	A	T	G	G	A	A	A	T	G	T	T	G	G	A	T	T	A	A	G	A	540
Rm8A	1561	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	1620
Rm8B	A	T	G	G	A	A	A	T	G	T	T	G	G	A	T	T	A	A	G	A	540
Rm8C	1561	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	1620
Rm8con	A	T	G	G	A	A	A	T	G	T	T	G	G	A	T	T	A	A	G	A	540
Lc743	I	S	D	E	L	K	M	I	D	V	P	E	M	D	K	I	K	Q	W	E	560
Rm8con	1621	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	1680
Lc743	A	T	T	A	G	T	G	A	C	G	A	T	T	G	A	A	T	G	G	A	560
Rm8A	1621	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	1680
Rm8B	A	T	T	A	G	T	G	A	C	G	A	T	T	G	A	A	T	G	G	A	560
Rm8C	1621	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	-----+	1680
Rm8con	A	T	T	A	G	T	G	A	C	G	A	T	T	G	A	A	T	G	G	A	560

Lc743	S	M	F	E	K	H	R	D	L	F	*	570
Rm8con	.	.	.	.	.	.	.	.	.	.	.	1713
	1681											
Lc743	TCGATGTTTGAAAAACATAGAGATTATTATTAG											
RM8A	.....Lc743/3'											
RM8B	.....										
RM8C	.....										
Rm8con	.....										

FIG. 1H

SEQ ID NO:14	1	ATGACTTTTCTGAAGCAATT	CATATTTGGCCTGAAACTATGCTTTAAATGCATGGTCAAT	60
		-----+	-----+	
		TACTGAAAAGACTTCGTTAAGTATAAAGCGGACTTTTGATACGAAATTTACGTACCAGTTA		
SEQ ID NO:13		M T F L K Q F I F R L K L C F K C M V N	-	
	61	AAATACACAAACTACCGTCTGAGTACAAATGAAACCCAAATAATCGATACTGAATATGGA	120	
		-----+	-----+	
		TTTATGTGTTTGATGGCAGACTCATGTTTACTTTGGGTTTATTAGCTATGACTTATACCT		
		K Y T N Y R L S T N E T Q I I D T E Y G	-	
	121	CAAATTAAGGGTGTTAAGCGAATGACCGTCTACGATGATTCTTACTACAGTTTCGAGAGT	180	
		-----+	-----+	
		GTTTAATCCACAAATTGCTTACTGGCAGATGCTACTAAGAAATGATGTCAAAGCTCTCA		
		Q I K G V K R M T V Y D D S Y Y S F E S	-	
	181	ATACCCCTATGCTAAGCCTCCAGTGGGTGAGTTGAGATTCAAGGCACCCAGCGGCTGTA	240	
		-----+	-----+	
		TATGGGATACGATTCCGGAGGTCAACCCACTCAACTCTAAGTTCGGTGGGTCCGCCGGACAT		
		I P Y A K P P V G E L R F K A P Q R P V	-	
	241	CCATGGGAGGGGTGTACGTGATTGCTGTGGGCCAGCCCAACAGATCGGTACAGACAGATTTC	300	
		-----+	-----+	
		GGTACCCCTCCACACATGCACCTAACGACACACCCCGGTGGTGTCTAGCCATGTCTGTCTAAG		
		P W E G V R D C C G P A N R S V Q T D F	-	
	301	ATAAGTGGCAAAACCCACAGGTTCCGGAGGATTGTCTATACCTGAATGTGTATACCAATGAC	360	
		-----+	-----+	
		TATTCACCGTTTGGGTGTCACAGCCTCCTAACAGATATGGACTTACACATATGGTTACTG		
		I S G K P T G S E D C L Y L N V Y T N D	-	

FIG. 3A

```

361 TTGAACCCAGACAAAGGGCTCCTGTTATGTTTTCATCCATGGCGGAGATTTTATTTTC 420
    AACTTGGGTCGTGTTTTCGGCAGGACAATACCAAAAGTAGGTACCGCTCTAAAAATAAAG
    L N P D K R R P V M V F I H G G D F I F -

421 GCGAAGCAAAATCGTAACTGGTTTGGTCCCGACTACTTTATGAAGAAACCCGTGGTCTTG 480
    CCGCTTCGTTTAGCATTGACCAAAACCCAGGGCTGATGAAATACTTCTTTGGGCACCAAGAC
    G E A N R N W F G P D Y F M K K P V V L -

481 GTAAACCGTGCAATATCGTTTGGGTGTGTTGGGTTTCCCTTAGCCTGAAATCGGAAAATCTC 540
    CATTGGCACGTTATAGCAAAACCCACACAAACCCAAAGGAATCGGACTTTAGCCTTTTAGAG
    V T V Q Y R L G V L G F L S L K S E N L -

541 AATGTCCTCCGGCAACGCTGGCTCAAGGATCAAGTAATGGCTTGAGATGGGTCAAGAGT 600
    TTACAGGGGGCGGTTGGGACCGGAGTTCCTAGTTTCATTACCGGAACTCTACCCAGTTCTCA
    N V P G N A G L K D Q V M A L R W V K S -

601 AATATTGCCATTTTCGGTGGCGATGTAGACAATATTACCGTCTTCGGCGGAAAGTGCTGGT 660
    TTATAACGGTAAAGCCACCGCTACATCTGTATTATAATGCGCAGAAAGCCGCTTTCACGACCA
    N I A I F G G D V D N I T V F G E S A G -

661 GGGGCTCAACCCATTACATGATGATAACCGAAACAGACCCCGTGGTTTATTCATCGTGGT 720
    CCCCCGAGTTGGGTAATGTACTACTATTGGCTTGTCTGGGCACCAATAAGGTAGCACCA
    G A S T H Y M M I T E Q T R G L F H R G -

```

FIG. 3B

```

721 ATCATGATGTCGGGTAATTCCATGTGCTCATGGGCTCTACAGAAATGCCAAAGTCGTGGG 780
-----+-----+-----+-----+-----+-----+-----+
TAGTACTACAGGCCATTAAAGGTACACGAGTACCCGGAGATGTCTTACGGTTTCAGCACGC
I M M S G N S M C S W A S T E C Q S R A -
781 CTCACCATGGCCAAACGTGTTGGCTATAAGGGAGAGGACAAATGAAAAAGATATCCTGGAA 840
-----+-----+-----+-----+-----+-----+-----+
GAGTGGTACCGGTTTGCACAAACCGATATTCCCTCTCTCTGTTACTTTTCTATAGGACCTT
L T M A K R V G Y K G E D N E K D I L E -
841 TTCCCTAATGAAGCCCAATCCCTATGATTGTGATCAAGAGGAGGCCACAAAGTTTGGACACCC 900
-----+-----+-----+-----+-----+-----+-----+
AAGGATTACTTTCGGTTAGGGATACATAAATACTAGTTTCTCCTCGGTGTTCAAACCTGTGGG
F L M K A N P Y D L I K E E P Q V L T P -
901 GAAAGAATGCCAAAATAAGTCAATGTTTCTCTTTGGACCCACTGTAGAACCATACACAGACA 960
-----+-----+-----+-----+-----+-----+-----+
CTTTCTTACGTTTTATTCCAGTACAAAGGAAAACCTGGGTGACATCTTGGTATGGTCTGT
E R M Q N K V M F P F G P I V E P Y Q T -
961 GCCGACTGTGTGGTACCCCAACCAATCAGAGAAATGTTGAAGAGCGGCTGGGGAAATTGG 1020
-----+-----+-----+-----+-----+-----+-----+
CGGCTGACACACCATGGGTTTGGTTAGTCTCTTTACCACTTCTCGGGGACCCCTTTAAGC
A D C V V P K P I R E M V K S A W G N S -
1021 ATACCCACATTGATAGGCAATACCTCCTACGAAGSTTTGCTTCCAAATCAATTGCCAAA 1080
-----+-----+-----+-----+-----+-----+-----+
TATGGGTGTAACATATCCGTTATGGAGGATGCTTCCAAACGAAAGSTTTAGTTAACGGTTT
I P T L I G N T S Y E G L L S K S I A K -

```

FIG. 3C

1081 CAATATCCGGAGGTTGTAAAGAGTTGGAATCCTGTGTGAATTATGTGCCTTGGGAGTTG 1140
 -----+-----+-----+-----+-----+-----+-----+
 GTTATAGGCTCCCAACATTTTCTCAACCTTAGGACACACTTAATACACGGAACCCCTCAAC
 Q Y P E V V K E L E S C V N Y V P W E L -
 1141 GCTGACAGTGAACGCAGTGCCCCGGAAACCCCTGGAGAGGGCTGCCATTGTGAAAAAGGCC 1200
 -----+-----+-----+-----+-----+-----+-----+
 CGACTGTCACTTGGGTACGGGGCCCTTTGGGACCTCTCCCGACGGTAACACTTTTTCGGG
 A D S E R S A P E T L E R A A I V K K A -
 1201 CATGTGGATGGGGAACACACCTACTCTGGATAATTTTATGGAGCTTTTGCTCCTATTTCTAT 1260
 -----+-----+-----+-----+-----+-----+-----+
 GTACACCTACCCCTTTGTGGATGAGACCTATTAAATAACCTCGAAACGAGGATAAAGATA
 H V D G E T P T L D N F M E L C S Y F Y -
 1261 TTCCCTCTTCCCCATGCATCGCTTCCTACAAATTCGGCTTCAACCAACACAGCTGGCACTCCC 1320
 -----+-----+-----+-----+-----+-----+-----+
 AAGGAGAAAGGGGTACGTAGCGAAGGATGTTAAGCGGAAGTTGGTGTGTCGACCGGTGAGGG
 F L F P M H R F L Q L R F N H T A G T P -
 1321 ATTTATTGTATCGTTTCGATTTCGATTCCGGAAGAAATTTATTAAACCCCTATCGTATTATG 1380
 -----+-----+-----+-----+-----+-----+-----+
 TAAATAACATAGCAAGCTAAAGCTAAGGCTTCTTTAATAATTGGGATAGCATAATAC
 I Y L Y R F D F D S E E I I N P Y R I M -
 1381 CGTTTGGCCGTGGCGTTAAAGGTGTAAAGCCATGCCGATGAGCTAACCTATCTCTTCTGG 1440
 -----+-----+-----+-----+-----+-----+-----+
 GCAAAACCGGCACCGCAATTTCCACATTGGGTACGGCTACTCGATTGGATAGAGAAGACC
 R F G R G V K G V S H A D E L T Y L F W -

FIG. 3D

```

1441 AACATTTTGTGAAACGCCTGCTGCCAAAGGAAAGCGCGAATACAAAACCATTTGAACGCATG 1500
-----+-----+-----+-----+-----+-----+-----+-----+
TTGTAAACACAGCTTTGGGGACGGTTTCCTTTGGGGCTTATGTTTTGGTAACTTGGGTAC
N I L S K R L P K E S R E Y K T I E R M -

1501 GTTGGCATTTGGACGGAAATTCGCCACCACCGGCAACCATACAGCAATGATATAGCCGGC 1560
-----+-----+-----+-----+-----+-----+-----+-----+
CAACCGTAAACCTGCTTAAGCGGTGTGGCGGTTTGGTATGTCGTTACTATATCGGCCG
V G I W T E F A T T G K P Y S N D I A G -

1561 ATGGAAACCTCACCTGGGATCCCATAAAAAATCCGATGATGCTCTATAAATGTTAAAT 1620
-----+-----+-----+-----+-----+-----+-----+-----+
TACCTTTTGGAGTGGACCTAGGGTATTTTTTTAGGCTACTACAGATATTTACAAATTTA
M E N L T W D P I K K S D D V Y K C L N -

1621 ATCGGCGATGAATTGAAAGTTATGGATTTGCCAGAAATGGATAAAATTAACAATGGGCA 1680
-----+-----+-----+-----+-----+-----+-----+-----+
TAGCCGCTACTTAACCTTCAATACCTAAACGGTCTTTACCTATTTTAATTTGTTACCCGT
I G D E L K V M D L P E M D K I K Q W A -

1681 AGTATATTCGATAAAAAAGGAATTTT 1710
-----+-----+-----+-----+-----+-----+-----+-----+
TCATATAAGCTATTTTCTTCTTAACAAA
S I F D K K E L F

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FIG. 3E

